

Application No.: 10/000460
Group Art Unit: 1732

Docket No.: SIW-024RCE

REMARKS

The forgoing amendment amends claims 1 and 5. Now pending in the application are claims 1-13, of which claims 1 and 5 are independent. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

Interview and Claim Amendments

Applicants amend claims 1 and 5 to clarify the scope of the claimed invention based on the discussion with the Examiner during the telephone interview on July 14, 2005. In particular, claims 1 and 5 are amended to recite that the upper mold and the lower mold have a first groove (a first set of grooves in claim 5) and a second groove (a second set of grooves in claim 5), respectively, and the first groove is separate from the second groove. Support for the claim amendment can be found in the figures and corresponding descriptions in the specification of the pending application. No new matter is added.

Rejection of Claim 1 under 35 U.S.C. §102

Claim 1 is rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,649,097 ("Sasaki"). Applicants respectfully traverse this rejection for the following reasons.

Claim 1 recites a method for fabricating a seal-integrated separator for a fuel cell wherein the seal-integrated separator includes a separator body and seals integrated on both sides of the separator body. The method includes the step of providing an upper mold having a first groove positioned corresponding to the seal disposed on one side of the separator body and having at least one gate, and a lower mold having a second groove positioned corresponding to the seal disposed on the other side of the separator body and having at least one gate. The first groove is separate from the second groove. The method also includes the step of injecting melted seal material to form the seals into each of the grooves in the upper mold and the lower mold through the gates respectively formed in the upper and lower molds.

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Applicants submit that Sasaki does not disclose that *the upper mold and the lower mold have a first groove and a second groove, respectively, and the first groove is separate from the second groove*, as recited in claim 1. Sasaki discloses in Fig. 4 a cavity (39) provided between the intermediate die (29) and the lower die (30). Sasaki, however, does not disclose that the intermediate die (29) and the lower die (30) have separate grooves.

Additionally, Applicants submit that Sasaki does not disclose the step of *injecting melted seal material to form the seals into each of the grooves in the upper mold and the lower mold through the gates respectively formed in the upper and lower molds*, as recited in claim 1. Sasaki discloses in Fig. 4 that sealing material is supplied into the groove (40a), then supplied into the groove (40b) via the hole (40c) to form gaskets (7, 8). The Sasaki reference does not disclose that the sealing material is supplied to the grooves (40a, 40b) through the gates respectively formed in the upper and lower molds, as recited in the claimed invention.

In light of the above, Applicants submit that Sasaki does not disclose each and every element of claim 1. Applicants therefore request the Examiner to reconsider and withdraw the rejection of claim 1 under 35 U.S.C. §102(e), and pass the claim to allowance.

Rejection of Claims 2-3 under 35 U.S.C. §103

Claims 2 and 3 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,649,097 ("Sasaki") in view of U.S. Patent No. 6,319,625 ("Gemberling"). Applicants respectfully traverse the rejection for the following reasons.

Claim 2 and 3 depend on claim 1 and add separate and patentable limitations to claim 1.

Applicants submit that Sasaki and Gemberling, in combination, do not teach the step of *injecting melted seal material to form the seals into each of the grooves in the upper mold and the lower mold through separate gates respectively formed in the upper and lower molds*, as recited in claim 1. Gemberling teaches a plurality of injection gates (54a-54d) in Figs. 4 and 5. However, the plurality of gates taught in Gemberling are not the gates respectively formed in the upper and lower molds, as recited in the claimed invention.

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In light of the foregoing arguments, Applicants submit that Sasaki and Gemberling, in combination, do not teach or suggest all of the limitations of claim 1. Claims 2 and 3, which depend on claim 1, are not rendered obvious over the cited references. Applicants therefore request the Examiner to reconsider and withdraw the rejection of claims 2 and 3 under 35 U.S.C. §103(a), and pass the claims to allowance.

Claim Rejections under 35 U.S.C. §103

Claims 4-13 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,649,097 ("Sasaki") in view of U.S. Patent No. 3,619,458 ("Engelhardt"). Applicants respectfully traverse the rejection for the following reasons.

Claim 4

Claim 4 depends on claim 1 and adds a separate and patentable limitation to claim 1.

Applicants submit that Sasaki and Engelhardt, in combination, do not teach the step of *injecting melted seal material is injected to form the seals into each of the grooves in the upper mold and the lower mold through separate gates respectively formed in the upper and lower molds*, as recited in claim 1. Engelhard teaches cylinders (11, 12) from which elastomer moves into the space (7) in Fig. 3. However, the cylinders taught in Engelhard are not the gates respectively formed in the upper and lower molds, as recited in the claimed invention.

In light of the foregoing arguments, Applicants submit that Sasaki and Engelhardt, in combination, do not teach or suggest all of the limitations of claim 1. Claim 4, which depends upon the claim 1, is not rendered obvious over the cited references. Applicants therefore request the Examiner to reconsider and withdraw the rejection of claim 4 under 35 U.S.C. §103(a), and pass the claim to allowance.

Claims 5-13

Claim 5 recites a method for fabricating a seal-integrated separator for a fuel cell wherein the seal-integrated separator includes a separator body, and dual seals which are integrated on

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both sides of the separator body. The method includes the step of providing an upper mold having a first set of grooves positioned corresponding to the dual seals disposed on one side of the separator body and having at least one gate, and a lower mold having a second set of grooves positioned corresponding to the dual seals disposed on the other side of the separator body and having at least one gate. The first set of grooves is separate from the second set of grooves. The method also includes the step of injecting melted seal material to form the seals into each of the grooves in the upper mold and the lower mold through gates respectively formed in the upper and lower molds. Claims 6-13 depends upon claim 5 and add separate and patentable limitations to claim 5.

Based upon the arguments set forth above, Applicants submit that Sasaki and Engelhardt, in combination, do not teach the step of *injecting melted seal material is injected to form the seals into each of the grooves in the upper mold and the lower mold through separate gates respectively formed in the upper and lower molds*, as recited in claim 5. Claims 6-13, which depend on the claim 5, are not rendered obvious over the cited references. Applicants therefore request the Examiner to reconsider and withdraw the rejection of claims 5-13 under 35 U.S.C. §103(a), and pass the claims to allowance.

Double Patenting Rejection

Claims 1-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of copending application No. 10/010,254. Applicants submit a Terminal Disclaimer in compliance with 37 C.F.R. 1.321(c) to overcome the obviousness-type double patenting rejection. In light of the Terminal Disclaimer, Applicants request the Examiner to withdraw the rejection of claims 1-13 under the doctrine of obviousness-type double patenting.

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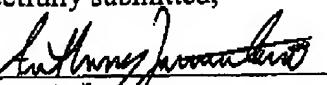
Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes \$1,940.00 is due with this statement and requests an extension of time herewith. However, if an additional fee is due, please charge our Deposit Account No. 12-0080, under Order No. SIW-024RCE from which the undersigned is authorized to draw.

Dated: July 22, 2005

Respectfully submitted,

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